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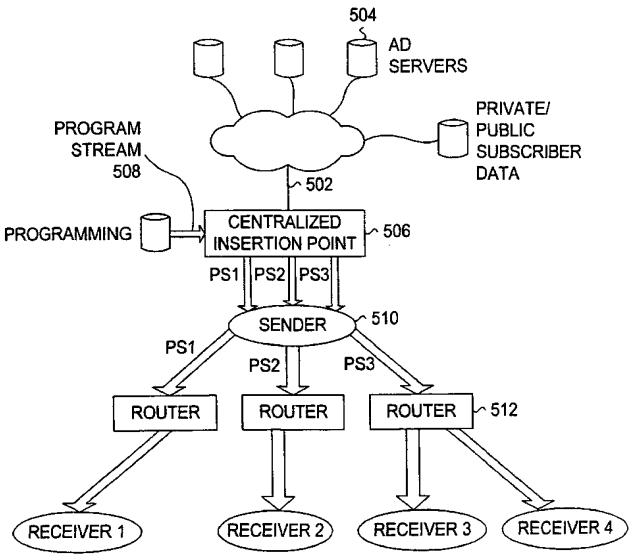
(54) Title: ADVERTISEMENT SUBGROUPS FOR DIGITAL STREAMS



(57) Abstract: A targeted advertising system based on subgroups. Different subgroups are formed based on one or more subscriber characteristics, and different targeted advertisements transmitted to the different subgroups. In the Internet-environment, the subgroups are formed by utilizing multicast addresses. In cable-based and satellite-based systems, the subgroups are formed by node configurations. The targeted advertisements (504) may be transmitted simultaneousy with programming (508) and inserted locally, or may be inserted at a centralized distribution point (506) such as a router or cable television local head-end. An apparatus is presented which receives *n* program streams and *m* advertisements, and creates *p* presentation streams containing targeted advertisements, where *p* is greater than *n*.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AMENDED CLAIMS
[received by the International Bureau on 6 January 2001 (06.01.01);
new claims 38-54 added; remaining claims unchanged (4 pages)]

38. A method for presenting targeted advertisements in a telecom system, the method comprising:

forming a group for reception of signals from the telecom system;

forming a plurality of subgroups for the group;

receiving a program stream;

selecting one or more targeted advertisements for a first subgroup;

multiplexing the program stream and the selected targeted advertisements at a centralized location to create a first presentation stream; and

transmitting the first presentation stream to the first subgroup.

39. The method of claim 38, further comprising:

selecting one or more targeted advertisements for a second subgroup;

multiplexing the program stream and the selected targeted advertisements for the second subgroup at a centralized location to create a second presentation stream; and

transmitting the second presentation stream to the second subgroup.

40. The method of claim 39, wherein said transmitting to the first subgroup and said transmitting to the second subgroup are performed simultaneously.

41. The method of claim 38, wherein the subgroups are formed by using multicast addresses.

42. The method of claim 41, wherein the multicast addresses are based on Internet multicasting protocol.

43. The method of claim 38, wherein the subgroups are based on cable nodes.

44. The method of claim 38, wherein the subgroups are formed by transmitting an MPEG signal over a cable television network.

45. The method of claim 38, wherein the subgroups are based on demographic attributes.

46. The method of claim 38, wherein the subgroups are based on psychographic attributes.

47. The method of claim 38, wherein the subgroups are based on product and brand usage attributes.

48. The method of claim 38, wherein said multiplexing is performed in real-time.

49. The method of claim 38, wherein the selected target advertisements are stored temporarily in storage for insertion at a later time.

50. The method of claim 38, wherein the program stream comprises one or more empty segments and during said multiplexing the selected targeted advertisements are inserted in the empty segments.

51. The method of claim 38, wherein the program stream comprises one or more default advertisements and during said multiplexing the default advertisements are substituted with the selected targeted advertisements.

52. The method of claim 38, wherein *n* program streams are combined with *m* advertisement streams resulting in p presentation streams, wherein *p* is greater than *n*.

53. The method of claim 38, further comprising:

assigning a subgroup address to each subgroup;

assigning an advertisement identifier to each of the selected targeted advertisements; and

creating a relationship between each subgroup address and each advertising identifiers.

54. The method of claim 53, wherein the selected targeted advertisements are inserted into the program stream based on the advertisement identifiers.